

5.10 WATER RIGHTS AND WATER USE

In 1988, there were approximately 57 water purveyors providing domestic supplies to development within the California portion of the Lake Tahoe Basin.

There were about 17 suppliers in California using over 100 acre-feet per annum (afa). Water supplies are obtained from public and private wells, intakes from Lake Tahoe, and surface water diversions from tributaries. In the past, some water purveyors did not always treat well water prior to distribution, although chlorination might be provided at certain times of the year. Drinking water from surface intakes, both from streams and Lake Tahoe, has historically been filtered and chlorinated prior to distribution. New federal drinking water regulations require higher treatment levels for surface sources; because of these regulations, water purveyors are increasingly changing from surface to ground water sources.

Total water diversion for consumptive use in the Lake Tahoe Basin is limited by the California-Nevada Interstate Water Compact, an agreement which, after 13 years of negotiation, was ratified by the legislatures of both states in 1970 and 1971, and partly ratified by Congress in 1990 as P.L. 101-618. On the California side of the Lake Tahoe Basin, total diversions for consumptive use from all sources (both surface and ground waters) are limited to 23,000 afa.

The State Water Resources Control Board, which is responsible for administering California's water rights program, issued a *Report on Water Use and Water Rights in the Lake Tahoe Basin* in January 1980. The report determined that after water rights held by the USFS, State Parks requirements, and certain exports and depletions are taken into account, 19,000 afa is available for use on private lands on the California side of the Basin. The report also estimated the amount of water used at different levels of projected development.

The State Board has adopted a policy of limiting new water rights permits in accordance with the Compact allocation. The State Board does not have permit authority over all diversions, however. The largest group of diversions not subject to permit is ground water diversions, which made up 54% of the total diversions for use on the California side of the Lake

Tahoe Basin in 1980. Local government has authority to regulate ground water pumping, and special ground water districts can be created, but current State law does not require local government to act, even when ground water pumping exceeds available supply.

The water rights study recommended that the State Board issue new water rights permits subject to conditions which ensure that issuance of the permits will not result in use in excess of the amount available under the Interstate Water Compact. It further recommended that water available for use on private lands be allocated among three zones corresponding to the boundaries of the North Tahoe, Tahoe City, and South Tahoe Public Utility Districts. Water rights permits would be issued to the utilities, allowing them to divert amounts equal to the amount allocated to the zone minus the total of all other diversions, including ground water diversions, for use on private lands within the zone.

In 1984, the State Board circulated a draft Environmental Impact Report (EIR) for update of its 1969 water rights policy for the Lake Tahoe Basin. The draft EIR considered several alternatives for allocation of unallocated water supplies, including one based on the recommendations of the earlier water use study. The draft EIR also estimated then-current (1982) water use levels, and predicted water use at various levels of buildout for the Lake Tahoe Basin. It predicted that the Interstate Compact limit could be exceeded at some levels of development without drastic increases in water conservation. It recommended that the State Board limit water rights allocations for private consumptive water use in relation to allowable buildout under the 1980 *Lake Tahoe Basin Water Quality Plan*. The State Board did not complete a final EIR or take action on the proposed policy changes.

Current levels of consumptive water use in the Lake Tahoe Basin are unknown. (Most water use is not metered.) New residential construction has occurred since 1982, but conservation efforts (e.g., landscape watering restrictions and requirements for ultra-low flow toilets) have increased due to drought conditions. TRPA predicts that there will be a 27% increase in population of the Lake Tahoe Basin between 1987 and 2007, but has not estimated ultimate buildout. Assuming that the Individual Parcel Evaluation System will permit development of some land capability Class 1, 2, and 3 lots which were not

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considered buildable under the 1980 *Lake Tahoe Basin Water Quality Plan*, it is possible that water use at buildout could exceed the Interstate Water Compact limits. The 208 Plan (Vol. I, page 307) states that the “range of ultimate demand for water supply on the California side would be approximately 21,600 to 24,200 afa.”

The State Board's water rights report recommends that local and regional agencies involved in land use planning consider the limitations set by the Interstate Water Compact, and that the State's water quality program take the availability of water into account. The California Water Code directs the State and Regional Boards to take water supply into account during water quality planning, and in issuing waste discharge requirements. The public utility districts provide sewerage service, for which they are subject to waste discharge requirements issued by the Lahontan Regional Board. Any additional development in the Lake Tahoe Basin which will increase water use will not be possible without a connection to the sewerage system. The number of units which may connect to the sewerage systems is limited by sewage collection, treatment, and disposal capacity. Accordingly, this Basin Plan requires that waste discharge requirements issued for these sewerage systems include conditions designed to prevent water use in the Lake Tahoe Basin beyond the Compact limitations. The conditions could take several different forms, ranging from connection limitations to water conservation programs. The precise form the conditions shall take will be determined when waste discharge requirements are renewed or modified.

The 208 Plan (Vol. I, page 299) states TRPA's intent to allow water supply systems to upgrade and expand to support existing and new development consistent with the its Regional Plan. This expansion should be phased in to meet the needs of new development without creating inefficiencies from over-expansion or under-expansion. However, expansion of water supplies may not violate TRPA's environmental threshold standard for instream flows for fisheries. This threshold establishes a non-degradation standard for instream flows until TRPA establishes instream flow standards in its regional land use plan. It is TRPA's policy to seek transfers of existing points of water diversion from streams to Lake Tahoe.

TRPA requires all projects proposing a new structure, or reconstruction or expansion of an existing structure designed or intended for human occupancy to have adequate water rights or water supply systems. TRPA cannot approve additional development requiring water unless it has, or provides, an adequate water supply within a water right recognized under state law.

TRPA recognizes that many water supply systems are in need of upgrading to insure delivery of adequate quantities of water for domestic and fire suppression purposes. Needed improvements include water lines, storage facilities, and additional hydrants. TRPA requires all additional development requiring water to have systems to deliver an adequate quantity and quality of water for domestic consumption and fire protection. Applicable local, state, federal, or utility district standards determine adequate fire flows, but where no such standards exist, the TRPA Code of Ordinances provides minimum fire flow requirements. TRPA may waive the fire flow requirements for its plan areas which are “zoned” for conservation and recreation uses, and for single family development if fire departments serving the development meet the requirements of the TRPA Code. Individual water suppliers will have to maintain their existing water supply systems, and upgrade them as appropriate to meet fire flow requirements, peak demand, and the need for backup supplies. Water suppliers will also have to provide treatment for drinking water from surface diversions in accordance with state and federal standards and regulations.

This Basin Plan provides exemptions from discharge prohibitions for public health and safety projects, including projects associated with domestic water supply systems. The 208 Plan recommendation that diversion points be changed from streams to Lake Tahoe was designed to protect stream and SEZ uses. As noted above, new treatment requirements are leading to an increase in ground water diversions. New wells in SEZs may affect SEZ functions both through direct disturbance for construction of wells and distribution lines, and through the impacts of ground water drawdown on SEZ soils and vegetation. When considering exemptions from discharge prohibitions for new or expanded ground water diversions in SEZs, the Regional Board should evaluate the water quality

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impacts and “reasonableness” of these projects in relation to those of the alternative of continued use of a surface source, even if treatment costs are higher.

The remedial erosion control projects proposed in this Chapter require use of irrigation water for revegetation. However, native plants will be used except for some temporary stabilization, and once established will not require irrigation. To ensure that the irrigation needed for revegetation can be carried out within the limits of water supply, the State Board's water rights decisions should reserve water for revegetation. Once it is determined that reserving water for revegetation is no longer necessary, the water can be made available for municipal and domestic use.

At the time that it adopted the 1980 *Lake Tahoe Basin Water Quality Plan*, in response to a comment by the Department of Water Resources, the State Water Resources Control Board agreed that the use of water meters should be required in the Lake Tahoe Basin. This recommendation has not been implemented. The State Board should revisit the need for water meters, and if appropriate, facilitate their use. The State Board should update its estimates of current and projected water use in the Lake Tahoe Basin in relation to allowable development and visitor use under current land use and water quality plans. The State Board should consider updating its 1969 water rights policy for the Lake Tahoe Basin, particularly in relation to the need to control ground water diversions under the Interstate Water Compact.